



Snow Rover Handbook
Winter 2014-2015
Mount Rainier National Park

POSITION DESCRIPTION

Position Title: Snow Rover and Winter Interpreter

Description of Duties:

- Makes public and personal safety a priority in all activities.
- Patrols trails on snowshoes or skis in the vicinity of the visitor center, assisting visitors and interpreting resources, and may help with snow play operations as needed. May help with parking lot patrols as well.
- Assists visitors at the Jackson Visitor Center, answering questions and providing informal interpretation of park resources.
- Follows snowshoe walks to assist visitors. May also assist with or lead public snowshoe walks.
- Attends scheduled winter operations training or alternative arranged with supervisor.
- Schedules work in advance by coordinating with the Snow Rover supervisor, and checks in upon arrival for information on current conditions and work assignments.
- May travel in a government vehicle en route to assigned work locations, and may make use of equipment provided by the supervisor, including park radios and snowshoes or skis.

Qualifications:

- Physically fit enough to spend at least two hours at a time on snowshoes.
- Able to communicate and represent the National Park Service well with diverse visitors.

Training: Winter Operations Training will be provided at the beginning of the season. Alternative training may be arranged individually by those who cannot attend the scheduled training.

Season/Hours: December through April. Volunteer will plan to participate at least one day per month, scheduling their duty with the Snow Rover supervisor.

Supervisors: Taryn O'Connell and Kevin Bacher, MORA_Meadow_Rovers@nps.gov

RESOURCES AND CONTACTS

Mount Rainier Volunteer Blog: <http://rainiervolunteers.blogspot.com>

Mount Rainier Volunteer Discussion Group: <http://groups.yahoo.com/group/RainierVolunteers>

*A good place to arrange carpools or find roving partners

NPS Online Interpretive Training Classes: <http://eppley.org/elearning/interpretation-1>

The 'Foundations of Interpretation' course is free. Informal Visitor Contacts course is recommended. Discount code to lower fee-based courses to \$29.00 is 07EPLY019

Primary Contact for Snow Rovers: mora_meadow_rovers@nps.gov

Snow Rover Coordinator: Taryn O'Connell, taryn_oconnell@nps.gov, Wed-Fri: 360-569-6575

Volunteer Program Manager: Kevin Bacher, kevin_bacher@nps.gov, 360-569-6567

Paradise Visitor Center (JVC): 360-569-6571

Longmire Information Center: 360-569-6575

Road Conditions: 360-569-2211 or <http://twitter.com/MountRainierNPS>

COMMON QUESTIONS

How do I know when the gate will open?

Call the park's phone number at 360-569-2211 and listen to the recorded messages for current road conditions, weather forecast, and an estimate of when the gate will open and what road conditions will be. Note that this estimate may change without notice due to unforeseen circumstances, including changing weather, equipment breakdowns, or avalanches on the road.

When does snow play open (or why isn't snow play open)?

In order to open snow play, we need at least 5' of snowpack on the ground. Additionally, we need the staff on duty to monitor the area for safety purposes. If we do not have both of these things, we can't open snowplay.

When will winter zone camping be allowed?

Winter camping is allowed once we have, again, 5' of snowpack on the ground. Some areas, Mazama Ridge and Reflection Lakes, only require 2' and typically open earlier.

Where can I go sledding?

Only in the snowplay zone. If snowplay is not open, sledding is prohibited.

Where can I sled if the run isn't open?!

There are numerous snowplay areas in Washington State SnoParks, and plenty of privately-run tubing areas. We should have an information sheet behind the desk to give visitors options.

Why is 5' of snow necessary? There is plenty of snow out here.

Five feet of snow is enough to safely cover young vegetation that is prone to dessication (drying out) if branches are snapped. It is also safer to wait for 5'. More obstacles are buried by snow, making it less likely that you will have a collision with another sledder or a rock/tree/sign.

Why can't I have my dog on the winter routes? He's not affecting the plants and there are no animals out here.

In the winter, many species of birds and other types of animals lose a significant amount of their body weight just by shivering to maintain body temperature. They have to eat a lot every day to survive. The birds will hide as long as the dog is in the area, and could possibly starve to death from not getting their food that day while hiding.

Where can I cross-country ski?

The Barn Flats and the Paradise Valley Road are fairly flat, gradual areas good for cross-country skiing. Additionally, many visitors cross-country ski in the Cougar Rock Campground loops, and on the West Side Road (both snow-permitting).

Where is a good place for beginner snowshoers?

The Barn Flats, the Paradise Valley Road, the Nisqually Vista route, and Glacier Vista route are all good places to take beginner snowshoers. Some mild navigation may be required through the Barn Flats and on Glacier Vista, and the Glacier Vista route is the most strenuous.

Where can I get snowshoes?

Snowshoes are available for rent in the gift shop at the JVC on weekends from 11:00am-4:00pm, and at the Longmire General Store every day until 5:00pm.

What is the avalanche forecast today?

Please refer to the daily avalanche forecast provided by The Northwest Avalanche Center. The forecast should be printed out by interpretive staff members each morning and put up at the desk in the JVC. Copies may be made for your use in the field.

Why do I have to sled in the snowplay area?

For your safety. This groomed run is the safest place in the park and is monitored by staff with EMT training. Other areas have unseen hazards, like snow bridges and tree wells. People also get injured sledding into the parking lot pavement.

What is the average snowfall here?

The average snowfall for Paradise is about 680 inches. The record snowfall at Paradise was 1122 inches (93.5 ft). This was the world record from 1972 until 1999 when Mt. Baker got 1140 inches. At its deepest, snow on the ground typically reaches about 16 feet in early April. During March of 1955, the snow reached 29'9" deep (just 3" short of the platform on the weather station along the Nisqually Vista Route)!

How tall is Mount Rainier?

The summit of Mount Rainier is officially 14,410 feet. It is the most prominent (greatest distance between base and summit) mountain in the contiguous in the Cascades as well as the contiguous U.S. It is the 5th tallest in the lower 48 (calculating from sea level).

How long does it take to climb the mountain?

Usually two days. The most common route is from Paradise to Camp Muir, where climbers spend the night on the first day. They usually begin to summit from Camp Muir around 1am and reach summit by 9am. Climbers come back to Paradise that afternoon. It is an 18 mile round trip, with 9000 feet elevation gain. And yes, a few people do climb in the winter. It's considered excellent training for those preparing to climb Mount McKinley or Everest.

Where is Camp Muir?

Point out where it is, or at least the general area. There is a ranger cabin, guide cabin, guide hut, public shelter, and an outhouse. Several rangers rotate shifts staying at Camp Muir over the summer.

How many people climbed Rainier last year?

About 10,000-12,000 people attempt to reach the summit each year. Roughly 50% make it. The rest turn around for a variety of reasons, including weather conditions or lack of stamina. The height of climbing season is June-August.

When was Mount Rainier first climbed?

Based on oral tradition, Native Americans were likely the first to summit. The first documented successful ascent was made by P.B. Van Trump and Hazard Stevens in 1870, who survived a night on the summit by taking refuge in a cave melted into the ice by steam vents.

What wildlife can I see here in the winter?

Much of the wildlife that can be seen at Paradise during the summer hibernates (marmots, bears) or migrates (deer, birds). Others stay active but remain hidden under the snow (pikas, some rodents). One can occasionally see ravens, jays, or other birds, since they can migrate very easily and come up to Paradise in favorable weather. It is also possible to see the Cascade red fox, which hangs out around Paradise in the winter. Blue grouse, a blackish-blue colored bird that looks kind of like a turkey, and ptarmigan, a chicken-like bird that turns white in

the winter, can also be spotted. You may see tracks or other signs of porcupine or martens. Remember, if you do spot any wildlife, remain a safe distance from that animal (for their safety too, not just yours) and DO NOT feed the wildlife.

What is that mossy stuff on the trees?

Goat's beard (green) or horse hair (brown/black) lichen lives on trees though it does not harm them. It survives off of the moisture in the air. It is more visible in the dead trees because there are no needles hiding it!

How many glaciers cover the mountain? Which one is biggest?

There are 26 glaciers on Mount Rainier. The largest in area is the Emmons Glacier (4.3 square miles) and the largest in volume is the Carbon Glacier (0.2 cubic miles).

Where can I touch a glacier?

Glaciers are dangerous. You need proper equipment (crampons, ropes, etc) as well as a climbing permit to hike on them. For good views of a glacier, visitors can hike the Glacier Vista route or the Nisqually Vista route.

Is Mount Rainier a volcano?

Mount Rainier is an active volcano that is in a dormant phase. Periodic tremors and active steam vents at the summit indicate that it is only sleeping, not dead. According to eyewitness accounts, there was possibly a small steam eruption in 1894. The last lava eruption was ~1100 years ago. Eruptions ~2000 years ago built the current summit cone. The most recent pumice and ash eruptions were likely in the 1840s.

Where are the ice caves?

The Paradise Glacier used to have ice caves, but now they're gone. The glacier, like many others on the mountain, has dwindled in recent decades, and the ice caves no longer exist.

ROVING AND INTERPRETATION

Adapted from "The Roving Interpreter's Checklist" and "Visitor Contact: Accentuating the Positive" by Dr. Jerry Blanche, and other sources. Updated 6/18/2010.

Roving interpretation establishes a National Park Service presence, provides information, orientation, and safety, and offers visitors an opportunity for better understanding park resources.

In roving interpretation, we join the visitors at their place, on their time, and work with them to select and transmit the message they need.

Roving interpretation demands...

- Social interaction skills
- Park resource knowledge
- Park facility knowledge
- Park regulations knowledge
- The ability to think and act with good judgment

1. Be safe

- Know the hazards of your area. Are there dangerous places on the route (ie avalanche terrain, snow bridges, tree wells, ice)? Is there dangerous weather coming in? What is the avalanche forecast?
- Do you have your radio and do you know how to use it?
- Is the place you're going within the winter roving range? Should you be going there alone?
- Do you have your PPE (Personal Protective Equipment) and Ten Essentials?

2. Know the current information that is relevant to the visitor

- Check the weather forecast
- Know the interpretive activities offered that day (snowshoe walk times)
- Know about road closures and restrictions, snow play, snow level

3. Know your visitors and what they may be seeking during their visit

- Are there any visiting special interest groups (foreign and ESL visitors, individuals with disabilities, Scouts, school groups, etc.)? What may the needs of these groups be (language pamphlets, wheelchair accessible areas, etc)?
- What cultures are you likely to encounter? How will this affect your interactions? Be aware that some people see anyone with a badge or uniform as the police and are predisposed to be wary.

4. Know the area

- Learn the winter routes and their terrain. Carry maps with you to share with the visitors and bring the laminated map and information sheets.
- Become familiar with the commonly asked questions about winter at Paradise.
- Know the regulations that apply to the area. Come up with *positive and educational* ways to inform visitors of the regulations (use "Authority of the Resource" technique).

5. Be professional and prepared

- Wear weather-appropriate clothing with a patch visible.
- Carry a fully-charged, working radio, and know how to use it/who to call.
- Carry a first aid kit and a full water bottle.
- Carry a garbage bag and use it if you see litter along the routes.
- Remove sunglasses when talking to visitor if conditions permit.
- Carry other useful items, including common handouts (avalanche danger, winter recreation), binoculars, etc.

6. Keep interactions positive!!! Advantages include...

- Long-term behavior changes more likely.
- An open channel of communication for continued or later messages from you or another park employee.
- Discouraging defensiveness during contacts.
- Visitors being more likely to share a positive message.

7. Technique for positive informal contacts:

- Identify yourself pleasantly (ex: Hi folks, how are you doing today? My name is Taryn and I'm with the park)
- Quickly identify to yourself what behavior is desired (ex: I need them to sled in the snowplay run instead of here)
- Attempt to avoid negative terms, such as "no", "don't", "stop", and "not".
- Be aware of body language and tone of voice – both yours and theirs. (ex: Speak respectfully and don't shout. Stand side-to-side or shoulder-to-shoulder rather than face-to-face. Take off sunglasses. Don't cross your arms, and keep an open/friendly stance.)
- Calmly, without excessive volume or force in your voice, use the words of the *desired* behavior.
- Thank them for helping you by exhibiting the desired behavior. Speak on behalf of the resource or the individual. (ex: "Hey folks, glad you could be here on a sunny day! My name is Taryn and I work here in the park. This area isn't good for sledding because of all the hazards to your safety, including the creek under the snow there. Staying in the designated sledding area is much safer and it is much easier for us to help you in case of an injury. Thanks for helping us keep you safe!" Opposed to "You can't be sledding there! You need to go over to the groomed run! You'll get a fine if the Law Enforcement officers get radioed here!")
- Listen patiently to their response. Show them that you truly are listening to them by looking at them and rephrasing their responses. Assure them that you know they have not made a deliberate mistake if necessary. Avoid arguments!
- Give a cheerful, positive send-off, such as "Have a fun afternoon!"

8. Other suggestions for contacts

- Assume the best. Everyone makes mistakes, so it's better to assume ignorance than malice.
- Talk on their level. Bend down to children if necessary to reduce the power differential.
- Use their name if they say it.
- Refer to other positive examples in the area; in fact, compliment a good example (if appropriate) as an opener or in the presence of a bad example.
- Try not to embarrass parents in front of their children, or people in general for that matter! Ask parents to share the positive message with their kids.
- In a group, pick one person to chat with rather than the whole group. Others will likely listen in.
- Visitors will likely follow your lead in behavior; anger will be met with anger, and calm with calm. What you start the interaction with will set the tone.

- Remember to describe their actions, rather than evaluating them as human beings (ex: “Dogs aren’t allowed on trail because it has negative impacts on the ecosystem” vs “You can’t have your dog here, you’re hurting the ecosystem”).
- *Do not use* “loaded” or emotional language, like “stupid”, “deliberate”, “ignorant”, “kid”, etc.
- Back off if the situation becomes confrontational. This goes along with avoiding arguments. If necessary, radio your supervisor (on weekends, call for the JVC or 553[Taryn]). If the situation escalates, remove yourself immediately. Take a moment to think about the contact before radioing in. If you truly feel that the visitor is a threat to the safety of yourself or any other visitors, remove yourself from the situation and radio dispatch with explicit detail of the interaction.

RADIO STANDARD OPERATING PROCEDURE

RADIO TRANSMISSIONS

Radio transmission should be limited to:

- Necessary transmissions – keep information concise and to the point unless asked to elaborate by dispatch or other personnel. This includes using frequent breaks during a long transmission to allow for emergency and other priority traffic.
- Official business only – the radio is not to be used to communicate unnecessary information or have personal conversations.
- The only available means of communication – Contact with your supervisor or the visitor center should only be made over the radio if immediate attention is required and the problem cannot be solved by going back to the office.
- Emergency situations – if there is a medical emergency or a visitor that is threatening the safety of you and/or other visitors.

When using the radio, avoid:

- Interference with other transmissions – unless you have emergency traffic! This includes transmitting during breaks in an LE’s contact. Wait until they are clear and it is confirmed by dispatch.
- Use of obscene, indecent, or profane language

Things that do not require radio transmissions:

- Sledders outside of the snowplay area
- Pets on trail
- Visitors hurting vegetation
- Visitors feeding wildlife

***All of the above are examples of contacts appropriate for snow rovers to make. Use the technique discussed at training and in this manual to help us manage the park and keep everyone safe. If a visitor is not compliant, disengage and continue on. It is acceptable to notify LEs of such instances, especially if the visitor displays aggression.

RADIO CHANNELS

When turning on your radio, it should be on 'Paradise'. If not, please adjust the station to be on the 'Paradise' channel (#1). You will not need to use any other station while snow roving.

CALL SIGNS

When using a Park radio, you must identify yourself. Some VIPs have radio call signs, while most do not. If you don't have a call sign, identify yourself using your last name as "VIP _____".

ACKNOWLEDGING TRANSMISSION

If you do contact dispatch, they are required to acknowledge your transmission. If dispatch does not copy after your transmission, it is possible it did not go through. After waiting a few moments for response, it is appropriate to repeat yourself. You may also be asked to repeat information by dispatch – this is another reason why frequently breaking during longer, non-emergency transmissions is important.

PRIORITY/EMERGENCY TRAFFIC

It is important to recognize that your traffic may not be the top priority of a dispatch operator. It is possible to be put on a short hold by dispatch if your traffic is or has the potential to interfere with higher priorities, even if you can't hear it. Wait until they clear your traffic to continue using the radio.

RADIO OPERATION

Using the radio can be intimidating for some. Do not be afraid to use the radio in situations where it is necessary. Above all, we are happy to have a representative of the park in the field with the capability to communicate with us. Before making a transmission:

- Gather yourself – it is important to remain calm and collected when communicating important information. This will help the recipient of your transmission address the situation appropriately.
- Gather information – if the scene is safe, get as much information as you can. This information may vary based on the type of incident at hand and the state of the individual you are contacting.
- Identify yourself – when initially contacting dispatch, make sure to identify yourself as VIP _____. This helps them help you!

For medical emergencies:

1. Location – be as specific as possible. Saying you are at the largest canyon rim overlook of the Nisqually Vista trail is preferable to just saying you are somewhere on the Nisqually Vista trail.
2. What happened? – again, be as specific as possible. If you did not witness the event, try to find out what happened from onlookers or the individual in question. What symptoms are they exhibiting? Are they bleeding? Did they just seemingly fall over?
***Any information you can get beyond this is a bonus! Location and situation are most important. Do not let reporting parties leave until you have a chance to communicate with dispatch and ask follow-up questions.**
3. Medical history – does this individual have a history of concussions? Of heart disease? Allergic to medications?
4. Age and gender
5. Appearance – what do they look like? What are they wearing?

EDUCATION OPPORTUNITIES

Authority of the Resource Techniques: http://www.bouldercolorado.gov/files/openspace/pdf_involved/authority-of-resource.pdf

National Park Service Online Interpretive Training Classes: <http://www.parktraining.org>

Foundations of Interpretation course is free. Informal Visitor Contacts course is recommended. There is a discount code to lower fee based courses to \$29.00. Look on the first page of the manual for the discount code.

Online Avalanche Training: <http://www.avalanche.ca/cac/training/online-course>

How to Read Topographic Maps: <http://www.map-reading.com/intro.php>

Orienteering Tutorials:

- <http://www.learn-orienteering.org/old/>
- http://bsatroop14.com/outdoor/Compass-Maps/Orienteering_Activity_Guide.pdf

Using a GPS:

- <http://www.map-reading.com/appendj.php>
- <http://www.squidoo.com/GPS-basics-background>
- http://ww2.trimble.com/gps_tutorial/

Land Navigation without a GPS or Compass: <http://www.squidoo.com/alternative-navigation>

Mount Rainier National Park Brochures: <http://www.nps.gov/mora/planyourvisit/brochures.htm>